W1TKZ

The Spark Gap

September 1988

**Official Journal
of the
Wellesley Amateur Radio Society**

President's Message

by Tom Kinahan, N1CPE

To bring everyone up to date so far, the election of officers was held on June 16, and all the previous Wellesley ARS officers were reelected for another term. They are:

President	Tom Kinahan, N1CPE
Vice-president	Rita Baker, N1DDI
Corresponding Secretary	Kathy Pate, KA1IYR
Recording Secretary	Roger Smith, W1EOA
Treasurer	C.J.McDonald, WB1BUM
Fund-Raising Chairman	Dave Kent, N2AWG
Operations Chairman	Vern Valero, ND1Z

Thanks for your support.

Plans are in the wind for the WARS flea market, and plans are in the wind — and may have in fact come to fruition — on the WARS 440 MHz repeater. Please check in to the Wednesday night nets on our repeater, 147.03 +600 kHz, at 8 PM. Many things have happened over the summer, as this edition of the Spark Gap will attest.

Many thank-you's to Art Anderson, N1FQX, who has taken on the task of editing the Spark Gap every month. Please send him your praise and suggestions for making your newsletter keep you better informed.

The results of the 220 MHz battle with the FCC should be known in a few short months. You'll recall that the FCC proposed reallocating 2 MHz of the 220-225 MHz band to the land-mobile service for narrow-band communications. Amateurs took exception to that, and have inundated the FCC with comments. Just as a resolution was expected, UPS filed late comments on their proposed new use for that disputed piece of the spectrum. This infuriated most hams, and another wave of paperwork flooded the FCC, as amateurs responded to UPS's late comments. Finally, the Secretary of Defense, in his comments, suggested that the only proper use of the 220-222 MHz spectrum was amateur radio in conjunction with some DOD uses which were able to coexist in the same band. The proposed land-mobile uses are not compatible with DOD uses, according to the Secretary. Resolutions were presented in Congress to the effect that the FCC should not take any more spectrum from the Amateur Radio Service, because of the emergency uses of the ham spectrum.

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Meetings This Month

Thursday, September 1 7:30 PM
Thursday, September 15 7:30 PM

211 Washington Street, Wellesley
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As we go to press, the following bulletin was issued by the ARRL:

"August 4, 1988

"FCC today adopted a report and order in General Docket 87-14, the proposal to reallocate the 220 to 222 MHz band to the land mobile service. In balancing the impact on existing users, emergency communications, and future amateur growth against land mobile requirements, the commissioners concluded that the reallocation was in the public interest despite overwhelming opposition. Wishing to reassure amateurs of its strong support for the service, FCC emphasized that the remaining 3 MHz of the band, 222 to 225 MHz, would be available to amateurs on an exclusive basis, thus removing the cloud that has hung over the status of the band for many years. The effective date of the reallocation will be announced later.

"ARRL continues to oppose the reallocation, and will pursue all available means to reverse the Commission action."

W1AW Visit

by Vern Valero, ND1Z

The Connecticut trip, on June 5, was a fun time. We had a delightful picnic, visited the dinosaurs, and then operated W1AW. The entire trip was professionally videotaped by Dave, KA1RWK, who dubbed music and subtitles into the tape.

Dinosaur State Park, although small in area, is large in things interesting to see and do. The area that today constitutes the park was originally to be the site of new State office buildings. After blasting through a surface rock layer, construction personnel discovered a layer of bedrock containing literally hundreds of dinosaur footprints. The citizens of Connecticut preserved this site as a scientific and historic monument.

A large geodesic-dome building protects the main track area from the weather. Inside is a walkway around the dinosaur-footprinted slabs. Specially-aimed spotlights accentuate the footprints and show the direction of travel. There are many dinosaur models and drawings of the Connecticut River as it might have appeared 200 million years ago.

Our visit was topped by a lecture by a park ranger. She told us how dinosaurs may have looked, how they walked, and why this site was so exciting to scientists.

We arrived at the ARRL in Newington quite late in the afternoon. This worked to our advantage, because the crowds had already departed. We practically had W1AW to ourselves!

The W1AW station consists of a large operating room and a smaller lab area in the rear. The spacious operating room contains computers for CW practice and RTTY bulletins, *huge* linears (lots of them), and, of course, many operating positions.

Club members generated considerable pile-up activity by signing W1AW. Although HF conditions were not very good, we did raise some interest on the bands.

Upon entering the station, one is confronted by The Old Man's spark-gap transmitter. "The Old Man" is Hiram Percy Maxim, founder of the ARRL and one of the very first radio amateurs. In past years, the W1AW staff regularly fired up the old spark gap, but last time it wiped out all data in the nearby computer.

Those unable to attend can see it all on videotape. Dave, KA1RWK, is an audio-visual professional, so, yes, our videotape really is HBO quality. Play it some time and see what you missed.

The Spark Gap
Official Journal of the Wellesley Amateur Radio Society

Editor:
Arthur W. Anderson, N1FQX
12 Border Road
Needham, Massachusetts 02192

The Spark Gap is published monthly, except July, by the Wellesley Amateur Radio Society. The Society hereby grants permission for reprinting any articles from **The Spark Gap**, provided only that the author and this newspaper are credited.

The Society's purpose is to encourage participation in amateur radio. Membership is open to all radio amateurs; dues are $15 per year (September through August). Meetings of the Society are held on the first and third Thursdays of each month. The Society conducts classes for those intending to take FCC license examinations, and examination sessions four times a year. For more information please write to the editor, or to the Society:

The Wellesley Amateur Radio Society
211 Washington Street
Wellesley, Massachusetts 02181

Veterans Parade

We have been asked to do communications for the Wellesley Veterans Parade again this year. Lift up the page on your calendar, and put a mark next to Sunday, October 16, 1988, and reserve it for the Parade. Two-meter operators will be needed. If you are interested contact Tom Kinahan, N1CPE, at 508-877-3456.

June VHF Contest

by Tom Kinahan, N1CPE

The June VHF Contest was again a smashing success! As expected, W1TKZ operated 6m, 2m, 220 MHz, 432 MHz, 903 MHz, 1296 MHz, 2304 MHz, and 10 GHz, from Mt. Equinox in Manchester, Vermont, on June 11 and 12. The weather was just fine for mountaintopping; the black flies were nowhere to be found (except on Monday, taking down) and a good time was had by all.

This time, we had all the towers assembled Friday night, thanks to an early arrival on the mountain. We actually had 6 meters operating Friday night, before the contest. This gave us a big head start for Saturday morning, when we put up the rest of the towers. All four towers were up and the stations were on the air, by the time the contest began, at 2 PM Saturday.

Jeff Klein, WA2TEO, one of our Mt. Equinox regulars, did the honors on 2 meters, for pretty much the entire contest, racking up a phenomenal 497 contacts and 53 grids, with no openings! (The KW didn't hurt, either.) Art Holmes, WA2TIF, and Art Anderson, N1FQX, did the honors on 432 and 220, with 101 and 77 contacts respectively. Arnie Adelman (W1GCI), Vern Valero, (ND1Z), Bill Knowles (KA1QWE), Paul Monroe (KA1LDV), Chuck Fisk (KB1WI), Jerry Driscoll (KA1OOO), John Antes (KB1EB), and Tom Kinahan (N1CPE) took up the rest of the bands, rotating in where needed.

Also on the hill that weekend was the Vintage Sports Car Club of America hill climb. These folks race up the five-mile mountain road at breakneck speeds. The following locals were spotted and/or heard on Mt. Equinox that weekend, during the car race: Dick Paret (WA1ZLQ), C.J. McDonald (WB1BUM), Bob (K1UUQ), and a host of others that skip my mind at the moment.

All in all, this VHF contest was our second best, bowing only to last June's fantastic E-skip openings. Six meters did open to the West and South, for a time on Saturday night, and short openings did happen sporadically through Sunday. Otherwise, no unusual enhancements to report. With the exception of about ten QSO's on 2m, and both contacts on 10 GHz, all the W1TKZ contacts were by SSB and CW. (We don't run FM or AM in this contest.)

Some people you'll recognize, that we heard on the bands that weekend, were: KA1PPG, N1EHM, and 4U1UN at the United Nations in New York City.

Thanks go out to Arnie Adelman (W1GCI), Art Holmes (WA2TIF), Don Cook (K1DPP), and Nels Anderson (K1UR), for the loan of equipment for the effort. Art Anderson's camper was just the thing for the cool Mt. Equinox night-time.

Now, for what you're really interested in — the scores:

Band	QSO's	Grids
6m	577	156
2m	497	53
220	77	31
432	101	36
902	18	9
1296	31	13
2304	2	2
10 GHz	2	2
	1,305	302

Score: 481,086 points

Field Day!

by Tom Kinahan, N1CPE

Field Day was held June 25 and 26 at the Sprague School fields, as in the past. This year, we operated in the 8A category; that is, eight simultaneous transmitters powered by a generator. Eight transmitters are *much* easier to deal with than last year's fifteen. We operated 75/80m from the club dipole stretched between the baseball backstop and the football uprights; 40m was on another club dipole; 20m used our 30-foot tower installed at the Field-Day site. Fifteen ran off Mike Karp's Double Bazooka (that thing works well!); 10m started out on KA1IU's Sterba Curtain, but we quickly realized that it was either too low to the ground or had some bad coax in the feed. Two meters was split between packet and FM, both of which operated off a Ringo Ranger antenna that we have bouncing around. Six meters was in operation courtesy of Joel KA1QIY's Squalo antenna, mounted on top of the baseball backstop. Dave Bush KA1RWK's 30-foot mast with 220 on it was great for getting out, with the help of a 20-watt amp, but the people calling back were using only very low power, and were seldom understandable.

We learned that there had recently been a solar flare, and band conditions were expected to be lousy. Fortunately, we didn't experience the results of the flare, but we did hear that 6m had some great E-skip into Europe. Our VHF contest station on 6m was not with us — we had only 10 W and an omni antenna — so we couldn't make anything of the Europeans.

Thanks to Elaine Chase, KA1SAO, who couldn't make it but did find time to let us borrow the nice tarp under which was the central meeting-place for the W1TKZ Field-Day operation, and to Bill Furbish, N1EHM, who lent the use of his camper for the weekend.

It was a great weekend, and it was a pleasure to see all of you there. Among those spotted at Field Day were: N1FGO, KA1NML,

KA1SAR, KA1DHV, N1ADY, N1FQX, KB1PA, KA1SAO, WA1YDL, K2VUI, W1EOA, KX1H, W1KIM, N1FPI, N1FCY WB1BUM, KA1IU, N1FME, WA1HRV, KA1PNA, KA1HGU, KA1SAJ, KA1RYV, KA1QIY, WB0QOH, ND1Z, and N1CPE.

O, yeah, thanks to John Stacy, W1KIM, for the work he did with the packet station. HIHI!

Field Day results:

75m SSB	101 QSO's
40m CW	27
40m SSB	91
20m CW	6
20m SSB	115
15m CW	9
15m SSB	233
10m SSB	88
6m SSB	4
2m packet	18
2m FM	7
220 MHz FM	3
All-band total	702

Independence Day, WARS-Style!

by Tom Kinahan, N1CPE

On July 4, the Wellesley ARS again converged on the USS Constitution, much as we did this past February, for a special-event operation.

W1TKZ was activated from the Boston National Historic Park, Pier 1, alongside the USS Constitution, for a good old-fashioned message fair. Once we got around the problems of dealing with the Secret Service, everything was A-OK. We set up two operating packet stations as W1TKZ and W1TKZ-1 on 145.01 and 145.07 MHz. We worked N1BGG in Charlestown, exclusively. Each message that we took from a visitor to the pier was typed into one of our packet stations and sent over to N1BGG, who automatically redistributed it to all parts of the country. We took 109 messages and entered them into the NTS.

The W1TKZ special-event station on HF was a little more difficult. It seemed that nobody wanted to talk to a station on this historic site on this Independence Day. Problems with RFI into the packet stations, and lack of responses to CQ's led us not to work anybody on HF at all.

Oh, yeah, you're probably wondering about the Secret Service.... It seems they didn't want us to park our cars near our setup area, even to unload them, because a certain Governor running for President of the United States was due to arrive shortly. Well, we solved that problem by moving our cars.

Governor Dukakis did arrive and give a speech on the topics of Independence Day and recent world events. Parts of his speech were seen on local and national television, but the reporters didn't seem interested in our operation. Some of us were photographed and asked our opinions on the US shootdown of the Iranian airliner the day before, but nothing about the wonders of amateur radio.

The USS Constitution did go for her turnaround cruise in the harbor, and fired her cannons. It was a fun, but very hot, day in the intense sun.

In all, we sent 109 messages from the Park. The following persons helped out and operated W1TKZ and W1TKZ-1: Liz (N1FUP) and Vern (ND1Z) Valero, Kevin Kelly (WA1YHV), Barry Porter (KB1PA), Art Anderson (N1FQX), Tim Cadigan (N1FME), Mort Cohan (KA1IU), Dave Bush (KA1RWK) and son Nathaniel (no call yet), Bob Salow (WA1IDA), Neil Grossman (KA1PPG), and Tom Kinahan (N1CPE).

Governor's Cup

We have been asked by the people behind the Governor's Cup Road Race to provide emergency communications for their race on October 2. The race starts and ends on Charles Street (Boston Common) and winds around the Common, down Commonwealth Avenue, and onto the Fenway for a short distance.

"This is a day for senior citizens to have their opportunity to shine, and to show the youth of America that they, too, deserve their special time for physical fitness. The day consists of a one-mile walk, a three-mile walk, and a five-mile run...."

We will provide health-and-welfare communications for the race. This means being at a position and watching for participants who need assistance, and calling net control for that assistance. Parking will be provided free, in the Boston Common Garage.

We are expected to be needed for the five-mile run portion. A minimum of five 2m operators are required. Contact Vern Valero, ND1Z, at 508-533-6822.

New England Steam & Wireless Museum

by Vern Valero, ND1Z

Wellesley ARS members visited the New England Steam & Wireless Museum on July 30, the day of the "Yankee Steam-Up". In addition to the regular museum exhibits, amateur steam fans displayed their homebuilt steam engines. There was also and antique-radio flea market in the fields.

The museum is located about ten miles south of Providence, just off RI Route 2. Its assortment of historical buildings house a menagerie of Corliss steam engines, as well as antique wireless and tube radios.

The radio artifacts are packed into a small building where hundreds of commercial, military, and amateur radios are displayed. Where else can you see a Crosley "Pup" or the insulators and wires used at the Marconi Wellfleet station? A 1-KW rotary spark-gap transmitter was in operation for the day's celebrations. An operator sent code to passersby on the spark transmitter. Most were too stunned (or blinded by the spark) to copy.

The building and equipment associated with the 1907 ship-to-shore station "PJ" has been brought to the museum site. This station once provided business and emergency communications for steamers on Long Island Sound.

The steam-engine building was alive with Corliss mill engines. It was quite a sight to see those huge flywheels turning around. Visitors and staff were quick to explain the operation to us.

A long table was provided for amateur steam hobbyists. Dozens of steam engines of varying sizes, capacities, and colors were huffing, puffing, and reciprocating.There were miniature steam trains, a steam car, and lots of whistles blowing all the time.

The antique radio flea market consisted of approximately twenty or thirty sellers. It differed from a hamfest, not only in the age of the equipment, but in the attitude that the radios are "antiques". Consequently, the prices were much higher than we are accustomed to seeing for "old equipment". Interestingly, we saw a number of old QSL cards for sale. One was that of Dick, K1RAW.

The Steam-Up day seemed to be a time for some folks to get a little crazy. For example, two men driving a diesel roller (the kind used to pave roads) kept circulating though the crowds. And there was the bagpiper who

played highland songs off-key. Perhaps the intense heat and humidity was to blame. It was fun to watch.

The New England Steam & Wireless Museum is located at the intersection of Frenchtown and Tillinghast Roads in East Greenwich, RI. Admission is $5 and it is open most weekends.

Let's Upgrade

by Vern Valero, ND1Z

We hope that this regular column will be a help to those seeking to upgrade their operating class. It might also be useful for our volunteer examiners. Suggestions are always welcome.

Certificate of Successful Completion

What exactly is a Certificate of Successful Completion? What does that funny little form entitle you to do?

The Certificate is proof positive that you passed certain exam elements. Each is signed by the volunteer examiners, and is an official document. It always states which exam elements you have passed at the session where it was issued. If you wish to upgrade before your permanent license arrives from the FCC, the Certificate may be used as "credit" towards the elements specified.

Let's take an example. Suppose you are upgrading to General and you try the 20 WPM Morse-code exam for the heck of it. Congratulations! You just passed 20 WPM! Although you may have upgraded only to General this time, the Certificate of Successful Completion gives you credit for the Extra-class code requirement. This credit is good for a year. You now have a year to take the Advanced and Extra written exams, and upgrade to Extra without being required to retake the 20 WPM code test.

There is one thing you must be aware of when using a Certificate for exam credit: it slows down the paperwork. The VEC can not forward your Form 610 to the FCC until you send them your most recent license. All this takes time and means that your "new" permanent license will take that much longer to arrive from the FCC.

In many cases, the Certificate also entitles you to operate with your new upgraded privileges. If, at this exam session, you passed all the elements required for an upgrade, the Certificate will state what your new license class will be. You can operate with new privileges by appending a special suffix to your call identification.

Suppose KA1QQQ passes the Technician exam and the Certificate specifies that the identifier is "KT". He or she can then operate on two meters by signing "KA1QQQ Temporary KT". Pretty nifty, isn't it?

The only persons left out of this fun are those without call signs. If a candidate who does not have a call sign passes certain exam elements and earns a license (of whatever class), the Certificate does *not* allow that person to operate. There is no call sign to operate under, so no operation is allowed. Some people attend exam sessions and pass both the Novice and Technician exams, but must wait several weeks before the operating license arrives.

In any event, don't lose the Certificate! It is an integral part of your license until the FCC prints your new ticket.

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New Examiners

Extra and Advanced club members are beginning to respond to our need for more certified Volunteer Examiners (VE's). Next month's column will list the names of our VE's.

The success of our quarterly exam program depends on a good supply of Volunteer Examiners. If you hold an Extra or Advanced license, and would like to volunteer a morning every six months, please contact Vern, ND1Z, AT 508-533-6822.

Acknowledgement

We would like to extend our sincerest thanks to Don Mauch. President of Profile Services, Incorporated, an employee benefits consulting firm, for donating his time and facilities to produce this new layout for **The Spark Gap.**

Next WARS Exam Session

Saturday, December 3, 1988

Wellesley Red Cross Building
10:00 AM
Call Vern, ND1Z 508-533-6822

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The Spark Gap

The Wellesley Amateur Radio Society

211 Washington Street
Wellesley, Massachusetts 02181

First Class Mail

WILLIAM HANLON N1ADY
49 VINE STREET
WRENTHAM, MA 02093
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